



ORIGINAL ARTICLE

## Representation of the image of the minor in the publicity circulated via the Internet<sup>☆</sup>



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### KEYWORDS

Minors;  
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### Abstract

**Introduction:** The representation of the minor in advertisements is a topic that is scarcely studied and reflected in the bibliography, in social paediatrics as well as audio-visual communication. The aim of the present study is to describe how the minor is represented in the publicity that is conveyed through the internet, and whether or not that representation is adequate.

**Material and methods:** An analysis was made of all the advertisements in which minors appeared during a period of two months, on three days a week, on the most visited web pages in Spain. The evaluation on how the minor was represented was carried out with an evaluation tool, constructed by the authors, based on European and Spanish legislation, which showed a high concordance between evaluators. A descriptive analysis was performed on the categorical variables, and the inter-dependent relationship was established between them using the chi-squared test.

**Results:** A total of 173 advertisements were identified in which at least one minor appeared, which was generally represented solo (63.5%), in a natural environment (36.9%) and of school age (44.5%). The web pages of the "general press" are those that most frequently show advertisement in which minors are represented, through the use of banners (82%). In the majority of cases the inadequate use of the figure of the minor takes place using tactical representation, and not just strategic.

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**PALABRAS CLAVE**

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**Conclusions:** The image of the minor in the publicity that is conveyed via the most visited web pages in Spain is inadequate in 2 of every 3 advertisements. This misuse of the minor is usually seen in as unjustifiably strategic, and favouring non-positive values or that they favour situations of inequality.

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## Representación de la imagen del menor en la publicidad difundida a través de Internet

### Resumen

**Introducción:** La representación del menor en los anuncios de publicidad es un tema poco investigado y reflejado en la bibliografía, tanto de la pediatría social como de la comunicación audiovisual. El objetivo del presente estudio es describir cómo se representa al menor en la publicidad que se vehiculiza a través de Internet, y si esa representación es adecuada o no.

**Material y métodos:** Se analizaron todos los anuncios en los que aparecían menores a lo largo de 2 meses, visualizando, 3 días por semana, las páginas web más visitadas en España. La valoración de cómo se representaba al menor se realizó con una herramienta de evaluación, elaborada por los autores, basada en la legislación europea y española, que mostró una alta concordancia interevaluador. Se realizó un análisis descriptivo de las variables categóricas y se estableció la relación de interdependencia entre las mismas a través de la prueba Chi-cuadrado.

**Resultados:** Se identificaron 173 anuncios donde apareció al menos un menor, que es generalmente representado solo (63,5%), en un entorno natural (36,9%) y con edad escolar (44,5%). Las páginas web de «prensa general» son las que más frecuentemente muestran anuncios donde se representan menores, a través del uso de banners (82%). En la mayor parte de los casos el uso inadecuado de la figura del menor tiene lugar mediante la representación táctica del mismo, y no meramente estratégica.

**Conclusiones:** El uso de la imagen del menor en la publicidad que se vehiculiza a través de las páginas web más visitadas en España es inadecuada en 2 de cada 3 anuncios. Dicho mal uso del menor suele objetivarse en la representación del mismo de forma estratégicamente no justificable, y favoreciendo valores no positivos o que favorecen situaciones de desigualdad.

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## Introduction

The representation of minors in mass media is a complex subject that has been studied in part in the literature of both social paediatrics and audiovisual communications.<sup>1</sup> The image of the child or adolescent in publicity tends to represent positive values. Companies take advantage of this circumstance to sell their products to the full range of potential consumers, using this image to convey innocence, happiness, affection... At times, these advertisements use minors in a way that presents an inappropriate image for them. For instance, the image of adolescents (especially female adolescents) may be hypersexualised, so that minors exposed to this content will be exposed to the notion of the objectification of women and to the message that social success is based on physical appearance, with the deleterious impact that this entails. On the other hand, it may promote unhealthy dietary habits in the paediatric population by advertising highly processed foods as healthy, contributing to the increase in the prevalence of obesity in this age group.<sup>2-4</sup>

For a few years now, Spain and the European Union have regulated the featuring of minors in marketing publicity through specific laws in addition to providing a set of recommendations.<sup>4-6</sup> Mass-media companies, on the other hand, have established mechanisms for self-regulation and control.<sup>7</sup> However, marketing companies still sometimes violate certain ethical boundaries in the representation of minors.

Internet use by the adult and the paediatric population has grown exponentially. Thus, 40.1% of users spends more than 4 h a day online, in most cases via their mobile phones.<sup>8</sup> This has led marketing companies to heavily focus on this medium as a vehicle for publicity. Due to the global scale of the internet and the near impossibility of controlling its contents, the potential use of minors as an appeal in advertising may often turn out to be inadequate and abusive. Online advertising is featured in websites through banners, pop-up or pop-under windows and sponsored links.<sup>9</sup>

A banner is an advertisement that usually has a rectangular shape arranged around the main content of a website and that links to the site of the advertiser.<sup>10</sup> Pop-ups are

windows that emerge automatically and are used to show an advertisement intrusively. Pop-up windows are a variation on the latter, opening a window in the browser underneath the active window.<sup>10</sup> Sponsored links are a marketing system that uses search engines, such as Google, in a model known as pay-per-click.<sup>11</sup>

The primary objective of our study was to describe how minors are represented in online advertisements and other online marketing contents found by accessing the internet through a personal computer. The secondary objective was to analyse whether their representation was appropriate or inappropriate based on a previously established good practice code.<sup>4,5</sup>

## Material and methods

We conducted a cross-sectional study in which we selected all advertisements of any format (banner, pop-up, pop-under, or sponsored links) that featured at least 1 minor in the 20 most-visited websites in Spain. The process for the selection of these 20 pages was established by the authors by consensus using several online sources as reference, including Alexa Internet Inc (an Amazon affiliate).

We selected webpages that featured advertisements in the formats detailed above in the home page, without having to navigate the site. We excluded sites that did not feature publicity in the home page or that only featured publicity based on the search that led to them or after requesting personal data. We also excluded social networks and pornography sites. We preselected 75 websites as candidates for analysis, and then established a definitive selection of 20 sites based on their volume of visits and the inclusion and exclusion criteria.

We visited the 20 pages selected (Table 1) and saved digital copies of the eligible advertisements 3 times a week for a period of 2 consecutive months. We browsed with the computer using Microsoft Edge, which allowed us to prevent the storage of cookies that could affect the contents of the featured advertisements.

We defined minor as any individual featured in an advertisement with a physical appearance corresponding to a person aged less than 18 years. We made a digital copy of each advertisement featuring a minor for subsequent assessment by the research team.

To assess the appropriate or inappropriate use of minors in advertisements, we established a good practice code that comprised 6 indicators (Table 6). The code was developed by 3 of the researchers with specific interest in social paediatrics and epidemiology based on current Spanish and European<sup>12</sup> law and the conclusions of authors such as Medina et al.<sup>4</sup> We developed specific training in the use of this tool, and validated it by assessing the interrater reliability for each indicator calculating the Cohen kappa coefficient, which yielded values between 0.85 and 0.9. Each advertisement was assessed independently by at least 2 researchers. In case of disagreement between these 2 researchers, a third researcher resolved the disagreement.

On account of the study characteristics, we did not need to perform a sample size calculation. Table 3 presents a selection of the categorical variables used to describe advertisements, with more detail given in Appendix B

(supplemental file). The variables used to describe each advertisement included, among others, the number of minors featured in the advertisement, their age, sex, race, the setting where they featured, their physical appearance, the circumstances under which they were featured, the advertised product, the website and the type of product advertised. We categorised the variables used to describe the websites and the advertised products to facilitate the analysis of the data. Another variable was noncompliance with the items constituting the good practice code (Table 2). We established an additional variable of "exploitation" which signified noncompliance with at least 1 of the good practice principles.

We entered the data in a spreadsheet (Microsoft Excel) and then imported it to the statistical package SPSS version 24 for Windows (IBM SPSS Statistics, 2016) to perform a descriptive analysis of the categorical variables and to assess their association by means of contingency tables and the chi square test.

## Results

We identified a total of 173 advertisements featuring at least 1 minor. Table 3 presents a summary that includes more results. In most of these advertisements, the minor appeared alone (63.5%) and in nature (36.9%). In 44.5%, the minors were children of school age, with less frequent featuring of preschool-aged children or adolescents. The presence of infants was particularly infrequent, amounting to barely 2% of the total. The prevailing sex was female (54.3%), with female minors featured significantly more frequently compared to male minors (23.1%) or the combination of male and female minors in the same advertisement (22.5%). Most of the featured minors were white (77.4%).

The highest frequency of advertisements featuring minors corresponded to general-interest websites (40.5%), followed by search engines (25.4%) and sports-related sites (12.1%). Considering each site individually, the website that featured the greatest number of advertisements with minors was yahoo.com (20.8%), followed by 20minutos.es (9.2%) and eleconomista.com (8.6%).

Of all the ads that featured at least one minor, 52% were for products aimed at adults (insurance, non-governmental organizations [NGOs] and other) and 47.4% for products aimed at families. Analysed individually, we found that insurance (21.3%), NGOs (21.3%) and fashion (19%) accounted for most of the advertisements featuring minors (Appendix B).

Banners were the most frequent type of advertisement (82%), followed with a substantially lower frequency by pop-ups (8.6%) and sponsored links (9.2%).

We found an inappropriate use of the image of the minor in 2 out of every 3 advertisements featuring at least one minor (65.9%). The principle that was violated most frequently was item 1, through the tactical use of minors (47.4%), that is, their presence in the advertisement did not have a strategic justification fitting the advertised product. The second most frequently violated principle was item 2, meaning that the image of the minor conveyed negative values or gender inequality (29.4%). Specifically, noncompliance with principle 1 was not significantly associated

**Table 1** List of most visited websites in Spain.

<a href="http://www.yahoo.com">www.yahoo.com</a>	<a href="http://www.as.com">www.as.com</a>
<a href="http://www.marca.com">www.marca.com</a>	<a href="http://www.hola.com">www.hola.com</a>
<a href="http://www.elpais.com">www.elpais.com</a>	<a href="http://www.elconfidencial.com">www.elconfidencial.com</a>
<a href="http://www.elmundo.es">www.elmundo.es</a>	<a href="http://www.abc.es">www.abc.es</a>
<a href="http://www.msn.com">www.msn.com</a>	<a href="http://www.lavanguardia.com">www.lavanguardia.com</a>
<a href="http://www.eldiario.es">www.eldiario.es</a>	<a href="http://www.20minutos.es">www.20minutos.es</a>
<a href="http://www.forocoches.com">www.forocoches.com</a>	<a href="http://www.eleconomista.es">www.eleconomista.es</a>
<a href="http://www.elle.es">www.elle.es</a>	<a href="http://www.expansi3n.com">www.expansi3n.com</a>
<a href="http://www.eltiempo.es">www.eltiempo.es</a>	<a href="http://www.mundodeportivo.com">www.mundodeportivo.com</a>
<a href="http://www.sport.es">www.sport.es</a>	<a href="http://www.publico.es">www.publico.es</a>

with the content category variable ( $P = .061$ ). Noncompliance with principle 2 was not significantly associated with featuring a female minor ( $P = .54$ ). The rest of the principles were violated less frequently (Table 2).

We found that inappropriate use of the image of the minor was significantly associated with the number of featured minors ( $P < .05$ ), the race of the minor ( $P < .05$ ), the circumstances under which the minor was featured ( $P < .05$ ), the setting in which the minor was featured ( $P < .05$ ), the type of website ( $P < .05$ ) and the format of the advertisement ( $P < .05$ ) (Table 3).

## Discussion

Safeguarding and upholding the rights of children are excellent indicators of progress and development in a country. In Spain, and more widely in the European Union, marketing and publicity targeting children have become controversial issues that have prompted the development of mechanisms for self-regulation and control. However, online marketing featuring minors is not subject to official regulation or to strict self-regulation by marketing and advertising companies.<sup>13</sup> This is compounded by the constant evolution of the formats used for publicity online with the aim of surprising the user and offering added value in an increasingly competitive environment.

According to Mart3n et al., there are 2 possible mechanisms to guarantee good professional practices in the field of publicity: external surveillance and internal control.<sup>14</sup> Aznar et al. add that internal control can also be considered a form of autocontrol or self-regulation.<sup>15</sup> Autocontrol applies to specific situations, behaviours or strategic decisions, whereas self-regulation refers to a long-term comprehensive approach to autocontrol.<sup>13</sup>

There are no data on the presence of children in online advertising. According to the Asociaci3n de Consumidores de la Comunicaci3n Audiovisual (Association of Audiovisual Content Consumers) of Spain, children are featured in at least 1 out of 3 television commercials. In approximately half of television commercials, general spectators and the objective target audience of advertised products consider that the presence of children is not justified, and even in the latter subset, the image of minors prevails over everything else. In 82% of cases, television advertisements featuring children are aimed at the adult audience.<sup>16</sup>

In our study, the tactical use of minors, which carries a negative connotation in the field of social sciences, corresponded to the higher proportion of violations of our good practice code. This was also the case in our yet unpublished data on the representation of minors in television commercials. This reflects an intentional and widespread practice by marketing companies, regardless of the medium, of using minors without taking into consideration the potential abuse of their image with the purpose of increasing product sales.

Several reasons may explain the interest of advertisers in the image of children. First of all, children play an increasingly important role as buyers and consumers, and they are often the member of the household that make the decision to choose a product over another. Secondly, the image of children in advertising influences consumption considerably, not only of foods and toys, but also of appliances, cars and travel services. Exposure to the kind and positive image of the minor in advertising, the recipient is more inclined to consume the advertised product, which is perceived as being better.<sup>1</sup>

**Table 2** Good practice code used in the assessment of selected advertisements.

Principle or item	Summarised description	Inadequate use ( $N = 173$ )
1	The presence of the minor in marketing messages must have a strategic justification and not be merely tactical	83 (47.4%)
2	The values associated with the representation of children must be of a positive nature, avoiding behaviours that promote inequality between the sexes	51 (29.4%)
3	Presenting the minor in situations not fitting the age of the minor is not recommended	11 (6.3%)
4	When it comes to physical appearance, the representation of children must be consistent with the features of an ordinary child	26 (15%)
5	Advertisements must not appeal directly to minors to buy or hire goods or services, exploiting their inexperience or gullibility	20 (11.5%)
6	Marketing communications on products specifically targeted to minors should not be misleading as to the characteristics of said products	2 (1.1%)

Noncompliance with each individual item is represented in the table as  $n$  (%). Each advertisement could be in noncompliance with none, one or several items.

**Table 3** Demographic characteristics of the minor and characteristics of the context in advertisements featuring at least 1 minor.

Variable	Categories	n (%)	P
Number	Single	110 (63.5%)	<
	Pair	29 (16.7%)	.05*
	Group	34 (19.6%)	
Sex	Male	40 (23.1%)	.59
	Female	94 (54.3%)	
	Mixed	39 (22.5%)	
Age	Infant	4 (2%)	.26
	Young child	45 (26%)	
	School-aged child	77 (44.5%)	
	Adolescent	47 (27.1%)	
Race	White	134 (77.4%)	<
	Black	33 (19%)	.05*
	Miscellaneous/other	6 (3.4%)	
Appearance	Healthy	166 (95.9%)	.19
	Disabled	1 (0.05%)	
	Ill	6 (3.4%)	
	Dead	0 (0%)	
Circumstances	Alone	67 (38.7%)	<
	With mother or father	53 (30.6%)	.05*
	With both parents	23 (13.2%)	
	With other children	27 (15.6%)	
	Other circumstances	3 (1%)	
Setting	Nature	64 (36.9%)	<
	Urban	18 (10.4%)	.05*
	Home	31 (17.9%)	
Website category	Other	60 (34.6%)	
	Sports	21 (12.1%)	<
	General interest	70 (40.5%)	.05*
	Gossip/Fashion	4 (2.3%)	
	Economics/Finance	21 (12.1%)	
	Browser	44 (25.4%)	
	Other	13 (7.5%)	
Advertisement format	Banner	142 (82%)	<
	Pop-up	15 (8.6%)	.05*
	Pop-under	0 (0%)	
	Sponsored link	16 (9%)	
Product category	Ads targeting adults	90 (52%)	.19
	Ads targeting families	82 (47.4%)	
	Ads targeting children	1 (0.6%)	

The last column presents the *p*-values obtained in the chi square test to assess the association between these characteristics and the inappropriate use of the image of the minor.

\* significant *p*-value with a 95% confidence level.

Zantides et al.<sup>17</sup> analysed how children were represented in printed magazines in Cyprus. Their findings revealed that, as late as 2011, the image they presented of female adolescents was still stereotypical. When the target of the advertisement was the adult population, children were used to sell food or household goods.

In Spain, in 2011 Ortiz et al.<sup>1</sup> highlighted that minors were featured in 4.5% of advertisements in national newspapers. Most of the advertisements featuring minors were issued by NGOs, governmental agencies, political parties and travel-related businesses.

In our study, more than half of the advertisements that featured at least 1 minor were aimed at adults. In the yet

unpublished study by our research team mentioned above, in which we used the same assessment tool and that included analysis of more than 600 television commercials, we found that in this medium minors were used to promote sales of food products (32%), products for children (9%), cars (8.2%) and life insurance policies (8%).

We found few advertisements targeted to children that featured children. This probably has to do with the type of user (adult) of the most frequently visited websites.

One limitation of the study is that we used a tool to assess advertisements that has not been validated yet, but as we noted above, it very specifically reflects the recommendations of the European Union and Spanish law on the subject.



On the other hand, the high interrater agreement in the use of this tool is one of the strengths of the study.

The main strength of the study is that it is the first to address the representation of minors in online advertisements, which is relevant from the perspective of social paediatrics.

In conclusion, the use of minors in advertisements published online requires more regulation, on the part of the authorities, but above all through improvement of self-regulation. Advertising and marketing companies and to a lesser degree the websites that post these advertisements are the main parties responsible for improving the use of the image of minors in this medium. The minors featured in this type of advertisements are usually featured alone and are most frequently female and of school age, and these advertisements are most frequently found in general interest websites and advertise products for adults or families. The inappropriate use of the image of minors usually involved a tactical use of this image and the representation of minors in association with negative or gender-biased values. The field of social paediatrics ought to involve itself further, offering objective recommendations and actively seeking change and improvement in the use of minors in audiovisual media.

### Conflicts of interest

The authors have no conflicts of interest to declare.

### Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.anpede.2020.01.008>.

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